

CLAIMS

What is claimed is:

1. An automatic library for cartridges of data storage tapes, comprising:
 - a drive for cartridges having the form of a flat right parallelepiped having a flat side, said drive having a cartridge pocket adapted to receive said cartridges; and
 - a magazine, said magazine comprising one or more receivers for said cartridges, said receivers being adapted to revolve on a closed path of revolution about the drive, said path of revolution being substantially in a plane,
 - wherein said cartridge pocket of the drive and the receivers of the magazine are disposed such that the magazine is positionable with one of said receivers being aligned with the cartridge pocket along an insertion axis for transfer of a cartridge, and
 - wherein the cartridges are adapted to be disposed in the receivers of the magazine and in the cartridge pocket of the drive with said flat side lying flat in said plane of the path of revolution.
2. The library as claimed in claim 1, wherein said path of revolution is a circular path.
3. The library as claimed in claim 2, wherein the magazine further comprises a circularly revolving plate.
4. The library as claimed in claim 3, wherein the receivers comprise catches, said plate being adapted to engage with said catches into the path of revolution of the magazine, and said catches being adapted to engage a cartridge.
5. The library as claimed in claim 1, wherein the magazine has a non-circular path of revolution.

6. The library as claimed in claim 5, wherein the non-circular path of revolution comprises two straight path sections parallel with respect to one another and to the insertion axis.

7. The library as claimed in claim 1, wherein when one of said receivers of the magazine is aligned with the cartridge pocket, a radially outer side of said receiver is aligned with a port of a housing.

8. The library as claimed in claim 1, wherein the receivers of the magazine comprise carriers adapted to contain cartridges, said carriers being adapted to be moved on the path of revolution by a continuously revolving driving means.

9. The library as claimed in claim 8, wherein the continuously revolving driving means comprises a toothed belt running over deflection wheels.

10. The library as claimed in claim 8, wherein the carriers are guided on their underside in a guide defining the path of revolution.

11. A method of accessing cartridges in an automatic library, comprising:
providing a drive for cartridges, said drive having the form of a flat right parallelepiped having a flat side, said drive also having a cartridge pocket adapted to receive said cartridges;
driving one or more receivers for said cartridges on a closed path of revolution about the drive, said path of revolution being substantially in a plane,
aligning one of said receivers with said cartridge pocket of the drive along an insertion axis for transfer of a cartridge, and

transferring a cartridges between said one of said receivers and said cartridge pocket with said flat side lying flat in said plane of the path of revolution.

12. The method as claimed in claim 11, wherein said path of revolution is a circular path.
13. The method as claimed in claim 12, wherein the receivers comprise catches formed on a circularly revolving plate, said catches being adapted to engage a cartridge.
14. The method as claimed in claim 11, wherein said path of revolution is non-circular.
15. The method as claimed in claim 14, wherein the non-circular path of revolution comprises two straight path sections parallel with respect to one another and to the insertion axis.
16. The method as claimed in claim 11, wherein when said one of said receivers is aligned with the cartridge pocket, a radially outer side of said receiver is aligned with a port of a housing.
17. The method as claimed in claim 11, wherein the receivers of the magazine comprise carriers adapted to contain cartridges, said carriers being adapted to be moved on the path of revolution by a continuously revolving driving means.
18. The method as claimed in claim 17, wherein the continuously revolving driving means comprises a toothed belt running over deflection wheels.
19. The method as claimed in claim 17, wherein the carriers are guided on their underside in a guide defining the path of revolution.

20. An automatic library for cartridges of data storage tapes, comprising:

a drive for cartridges having a cartridge pocket adapted to receive a cartridge, said cartridge having a flat side; and

a magazine including one or more receivers for holding said cartridges, said receivers being adapted to revolve on a closed path of revolution about the drive, said path of revolution being substantially in a plane of revolution;

wherein each of said receivers is capable of being aligned with the cartridge pocket along an insertion axis for transfer of a cartridge between said receiver and said cartridge pocket, and

wherein each of said receivers and the drive are adapted to receive a cartridge with said flat side lying flat in a plane substantially parallel to said plane of revolution.

21. An automatic library for cartridges of data storage tapes, comprising:

a drive means for accessing cartridges, said drive means having a cartridge pocket adapted to receive a cartridge, said cartridge having a flat side;

means for holding cartridges outside said cartridge pocket;

means for driving said means for holding on a closed path of revolution about the drive, said path of revolution being substantially in a plane of revolution,

means for transferring a cartridge between said holding means and said cartridge pocket with said flat side lying flat in a plane substantially parallel to said plane of revolution.